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10/068,422	02/06/2002	Mark Yarkosky	1653	9566
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			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/068,422

Applicant(s)

YARKOSKY, MARK

Examiner

Michael J. Moore, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,9-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-17 is/are allowed.
- 6) ☒ Claim(s) 1-6,18-24 and 26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Drawings*

1. Replacement drawings were received on 12/11/06. These drawings are acceptable and have been entered. However, after further review, an objection is made as provided below.

2. The drawings are objected to because of the following informalities:

In Figure 2, it is believed that the term "date range" in step 46 should be changed to "data rate" in order to correspond to the specification on page 12, lines 21-23.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended."

If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures.

Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be

notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Amendments made by Applicant to claim 9 to obviate the claim objections presented in the previous Office Action are proper and have been entered. These objections have been withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5, 6, 18-21, 23, 24, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Nefedov (U.S. 6,704,368). *Nefedov* teaches all of the limitations of the specified claims with the reasoning that follows.

Regarding claim 1, “a base station measuring at least one level of interference on a reverse link of an air interface” is anticipated by the measurement of the signal-to-interference ratio (one level of interference) by the base station 1101 on the uplink as spoken of on column 10, lines 1-6 and column 10, lines 14-16.

Lastly, “based on the at least one level of interference, selecting a vocoder data rate for signals transmitted from the base station to at least one mobile station; and

causing the signals from the base station to the at least one mobile station to be transmitted at the vocoder data rate” is anticipated by the using of the signal-to-interference ratio measurement (one level of interference) to determine the optimal amount of coding (vocoder data rate) that would ensure reception of data over the radio path at a satisfactory level as spoken of on column 10, lines 6-9.

Regarding claim 2, “wherein the at least one level of interference is aggregate energy-to-interference on the reverse link and the at least one mobile station is a plurality of mobile stations” is anticipated by the energy-to-interference measurements spoken of on column 10, lines 1-6.

Regarding claim 3, “wherein the at least one level of interference is energy-to-interference on the reverse link and the at least one mobile station is one mobile station” is anticipated by the energy-to-interference measurements spoken of on column 10, lines 1-6.

Regarding claim 5, “causing separate signals from one of the at least one mobile station to the base station to be transmitted at a separate transmit power” is anticipated by terminal device 1102 (mobile station) that converts recorded sound and uplink data to a data stream for transmission as spoken of on column 9, lines 58-67.

Regarding claim 6, “causing separate signals from the at least one mobile station to the base station to be transmitted at a separate vocoder data rate” is anticipated by the transmission by an encoder having a fixed coding rate (vocoder data rate) as spoken of on column 5, lines 36-43.

Regarding claim **18**, “a base station” is anticipated by the base station 1101 shown in Figure 11.

“A processor” is anticipated by the encoding block 1106 (processor) of base station 1101 of Figure 11.

“Memory” is anticipated by RF part 1107 (memory) of base station 1101 of Figure 11.

“A vocoder” is anticipated by the encoding block 1106 (vocoder) of base station 1101 of Figure 11.

“Measuring at least one level of interference on a reverse link of an air interface” is anticipated by the measurement of the signal-to-interference ratio (one level of interference) by the base station 1101 on the uplink as spoken of on column 10, lines 1-6 and column 10, lines 14-16.

Lastly, “based on the at least one level of interference, selecting a data rate for signals transmitted from the base station to at least one entity; and causing the signals from the base station to the at least one second entity to be transmitted at the data rate” is anticipated by the using of the signal-to-interference ratio measurement (one level of interference) to determine the optimal amount of coding (data rate) that would ensure reception of data over the radio path at a satisfactory level as spoken of on column 10, lines 6-9.

Regarding claim **19**, “wherein the data rate is selected from the group consisting of approximately a full data rate and approximately a ½ rate” is anticipated by the

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transmission by an encoder having a fixed coding rate as spoken of on column 5, lines 36-43.

Regarding claim **20**, “wherein the at least one level of interference is aggregate energy-to-interference on the reverse link and the at least one entity is a plurality of entities” is anticipated by the energy-to-interference measurements spoken of on column 10, lines 1-6.

Regarding claim **21**, “wherein the at least one level of interference is energy-to-interference on the reverse link and the at least one entity is one entity” is anticipated by the energy-to-interference measurements spoken of on column 10, lines 1-6.

Regarding claim **23**, “causing separate signals from one of the at least one entity to the base station to be transmitted at a separate transmit power” is anticipated by terminal device 1102 (one entity) that converts recorded sound and uplink data to a data stream for transmission as spoken of on column 9, lines 58-67.

Regarding claim **24**, “wherein the computer instructions further perform the function of causing separate signals from the at least one entity to the base station to be transmitted at a separate data rate” is anticipated by the transmission by an encoder having a fixed coding rate (data rate) as spoken of on column 5, lines 36-43.

Regarding claim **26**, “wherein the at least one entity is at least one mobile station and the at least one mobile station comprises a vocoder” is anticipated by the terminal device 1102 (mobile station) of Figure 11 having encoding block 1114 (vocoder) as spoken of on column 9, lines 49-57.

***Claim Rejections - 35 USC § 103***

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **4 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nefedov (U.S. 6,704,368) in view of Love et al. (U.S. 6,034,971) (hereinafter "Love").

Regarding claims **4 and 22**, *Nefedov* teaches the method of claim **1** as well as the base station of claim **18**, respectively.

*Nefedov* does not teach that based on the at least one level of interference, selecting a transmit power for signals transmitted from the base station to one of the at least one mobile station; and causing the signals from the base station to the one of the at least one mobile station to be transmitted at the transmit power.

However, *Love* teaches a forward link control method where the forward link power level is adjusted in proportion to a ratio of new and previous encoding rates as spoken of on column 5, lines 22-24.

At the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to combine the power adjustment teachings of *Love* with the interference measurement teachings of *Nefedov* in order to provide efficient power management based on the level of interference present in the system.

***Allowable Subject Matter***

7. Claims **9-17** are allowable over the prior art of record.



8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims **9-17**, these claims are allowable for the reasons indicated in the previous Office Action.

***Response to Arguments***

9. Applicant's arguments with respect to claims **1-6, 18-24, and 26** have been considered but are moot in view of the new ground(s) of rejection provided above.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Moore, Jr. whose telephone number is (571)

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272-3168. The examiner can normally be reached on Monday-Friday (7:30am - 4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J. Moore, Jr.  
Examiner  
Art Unit 2616

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